

Plant Disease in Kansas

Weather conducive to diseases in wheat

Special points of interest:

- *Wheat stripe potential is getting stronger for a sizable problem this year.*

The past two weeks of cooler weather across much of the state and mixed with precipitation has been favorable for several foliar diseases. We look for some increase in the amount of disease pressure in the field.

The two diseases that will be favored by the conditions are stripe rust and powdery mildew. Stripe rust has been reported across much of the state during recent survey. This rust was noted in fields in north central and in southwest Kansas in late April and now in many more areas and common (J Appel, E DeWolf, KSU). The wheat maturity is delayed in many parts of the state with cooler weather giving this disease more time to build up. If temperatures continue to stay under 75 degrees F, this disease

could be the most important problem this year with significant losses. Windy weather also has been hurting the situation for us by blowing spores around and scattering the potential to many fields in Kansas. Texas and Oklahoma see a moderate to high disease outbreak this year. Many fields have yield potential of 40 to 65 bushels per acre and should be considered as potential economic fields where susceptible cultivars could be protected with a financial return.

Another disease that historically has been favored by the current weather and crop maturity is powdery mildew. This disease is favored by wet cloudy conditions and with maturity slowing down, the disease has the potential to move up onto the important flag leaf and into the head.

Some PM moderately infected fields have been noted in south central and central Kansas at mid canopy.

Two other diseases are worth noting. One is the Septoria disease complex of speckled leaf blotch and nodurum blight. The other is black chaff caused by a bacteria. Both diseases are favored by wet conditions and leaf moisture.

Currently wheat scab risk is still rated low in the state but if conditions warm up to mid 70's and we stay wet look for the potential to be there if the local crop is flowering or in early dough stage. Risks go up if the crop is planted on corn debris. Go to the following to look at prediction models (80 % accuracy): <http://www.wheatcab.psu.edu/>

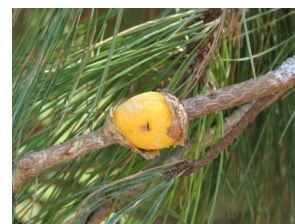
Weather conducive to pine tip blight

Just like the story before, cool wet conditions are favorable for several diseases of pines. The one of greatest concern currently is pine tip blight. Candle formation and needle elongation is common to tree across Kansas. This is the time of the year for the fungus that causes pine tip blight to attack the new growth. Dry weather was good

for the tree species last week, but wet weather this week is not good. Trees that have a history of disease should be considered for spray protection this week.

In other news, western gall rust was reported sporulating about a week ago in east central Kansas (T. Sanders, B. Buhler

KDA). It is a pine-pine rust meaning it spreads from pine to pine as opposed to another species of plant to complete a full life cycle.



PLANT PROTECTION AND WEED CONTROL
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INVASIVE SPECIES

Plant Protection and Weed Control Program

Plant Protection and Weed Control staff work to ensure the health of the state's native and cultivated plants by excluding or controlling destructive pests, diseases and weeds. Staff examine and analyze pest conditions in crop fields, rangelands, greenhouses and nurseries. Action taken to control potential infestations of new pests, whether they are insects, plants diseases or weeds, is beneficial to the economy and the environment.

Our Mission is to:

- Exclude or control harmful insects, plant diseases, and weeds;
- Ensure Kansas plants and plant products entering commerce are free from quarantine pests;
- Provide customers with inspection and certification services.

The Plant Disease Survey in Kansas has been conducted since 1976. The survey addresses disease situations in field crops, native ecosystems, and horticultural trade. The Kansas Department of Agriculture works cooperatively with Kansas State University and Extension programs, United States Department of Agriculture, and various commodity groups.

Forestry work shops

If interested, here are two field days that may be of importance to you.

The first one is May 20th in Cimarron, Kansas and focuses on windbreak tree health. Contact the Gray County Extension office at 620-227-3731 for more information or the Kansas Forest Service in Manhattan at 785-532-3310.

The second one is in Coffeyville, Kansas on June 3. It focuses on black walnut and sponsored by the Black Walnut Council in Kansas. Contact again is with the Kansas Forest Service or the Black Walnut Kansas chapter at 785-484-

2509.

Both work shops will feature presentations on Thousand Cankers of walnut, a new threat to one of the most important natural species of trees in Kansas.

Images are a tree under TCD decline in Denver, Colorado. Note the dead branches without leaves. The other image is stacks of Kansas walnut lumber in a kiln being processed for overseas shipment from a Kansas City processor.

